

SEQ ID NO:16

Rat Smooth Muscle Myosin Heavy Chain Gene Sequence (-4,216 to +11,795)

Nucleotide 1 corresponds to -4,216 bp relative to the SM-MHC transcription start site

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1057326-03403

AGATCTTAAA	ACACATCAAC	CTGGGCTGAG	GGGATGTGTG	TCTCTGTGTC	TGTGTATGCA	60
CATGCATTTG	AGGCCAGATG	AAAATGTCAG	ATGTCCTCTC	ACTGCTTTAT	TCCCTTGAGA	120
CAGGGTCCCT	CACTGAACCT	GTTGGAGCTA	TGCTGGTAGC	CAGCAAGCCC	CAGTGGCCTT	180
CCTGTCTCTA	TCTCACACAG	CACAATATGT	GTGGCCATGC	TCCACTTTTT	TACATGGAAA	240
TTGGGGTCTT	CCAACTGGGG	TTCTCATTTG	TGCAGTGACA	CTCTTCCCCA	CTGAGCCATC	300
TCCTCAGGCC	AGCTGATATA	TTTTTAAATA	ATTAAATATT	TAGCACATGC	CTTTAGAAGC	360
CAATAGCTAT	TTAAAGCTGT	TTGCTTAAAA	AAAAAAAAAA	AAAAAAGACT	TCATTATCCC	420
AACACTTATG	AGGGAGAGAC	AATAATTCCA	AAACCAGAAC	CAGCCAGGGT	ACACAGTGAG	480
ACTTTATTTA	AAAAAAAAAA	AAAAAGAAAG	AAAGAAAAAA	AAAAGAAAAA	GAAAAAATAA	540
GGCTCCAAAG	AGAAATTTCC	CCTTCATCAT	CTAATCACAA	GAAAAACAATT	TATTTATTTT	600
GACATCACTC	AGTCCAAAGG	AGCTTTTTGT	AAAGTGACTT	CTCTTCTTAA	AATAAGTGAC	660
CCTTCCCAAC	CACCAAAAAC	AAAACAGAAA	CCTCTGCCCT	GTTCTAGAGT	CCTTTTGAAG	720
ACTTCAGATA	CCTGAAGAGT	GGACAGATAT	TTACCGAGTG	ACTTAAATGA	ACATACTGTC	780
CCTGGGTACT	GCTCAAGCAT	GCCAGGAGAG	CATGGATGGT	TTATGCAAGG	CTGGCACTGT	840
CATTAACAAC	TCAGTAAGGC	GGAGAAGACA	GAGAGCCTCT	CCTAAGACAA	TGGCACATAA	900
GGACATGGGT	AACCCAGAG	GTTCCCGGCT	AGTACTTAGC	AGAGCTGAGA	TCAGACTTGG	960
GCCTCTGTGC	TCGCTTGCC	AGTGGGCAAC	ACTCAAGACT	GGGGTAAACA	ATAAGTTGAT	1020
CTGGGATATG	GCTCAGTAAT	CACACTGAGA	ATTCAACACT	GGGAAGGCAG	AGGAGGATCC	1080
CTGGGATTGC	TGCCTGGCTC	TCTAGCAGCC	TAGCAGAATC	AACAAACTCC	AGGTTTCAGTG	1140
AGAGATGCTC	ACAAAATAAA	ATGGAGGAGC	AACTGAACAC	ACTCAGTGTT	GACCCACACA	1200
CACACTAAAG	AACACGTGTA	CCACACAGAC	ACAGACACAG	GATAACCTAC	CCATGTTGTG	1260
TATGGACTCA	GCCAGCCCAG	GTTGGAAACT	CAGTTCCTCT	GTTAACTCTT	TTCAAACCTG	1320
GGTCCTCAGC	GATGTGCTGG	GGAACCTACT	TCACGGCATT	ATTCTGGGCA	TTAGATGTAA	1380
AGGAAGCAGT	AAAGTTTTCC	TTTTCTTGAC	TGAGGTGATG	CGAGAATGAG	GGCCTGAATT	1440
CCATCTCTAG	GACTCACATA	AAGACACCCA	GACTGCACTG	GCCAGTAAGC	CTCACCTATG	1500
CCTCCAAGCC	TGGCTGTGAG	AGACTGTCTC	AAAAACAAAG	TAAAAACAAC	AAAATCAATG	1560
TCAGATGTGC	ACATGCGAA	TCCCAGCATG	TGTACGGCAT	GCTTGCAATC	AGCCTTGTTT	1620
ACAGAGAGTT	CTAGGCCAAC	CAGCTATACA	CAGTGAGACC	CTGTGGTAGA	CGGCTCCTAA	1680
GAACTGACAT	TTGTGACTGA	CAGATGTGCA	CATCTACCAC	ATGCACATCA	CAGTTTCCAT	1740
TTTACAAAAA	GGTTAACTACT	TACTAATTGA	TTAGGGAGTG	GGGCACCCCA	CTGCTACATG	1800
TGAAAGCCAG	AGAATGATGT	GTTCCAGTCG	GTCAGTTGTG	TCCTTCCACC	ATGTAGGTCC	1860
TAAAAATGGA	ACTCAAGGCA	GTCTTGGCAG	CAAGTGCTTT	ATCCATAGTG	CCATCTTATT	1920
GGCCCAAGTCT	CCTTATAATG	AAATTATTTG	TGTTTCCAAG	TTGATGTAAT	TCTTTAAAAA	1980
TCAGCTGTGC	TCCTTGGAGT	TTGACTTCAC	TGAAGCCTGC	TACAGGAGTG	CCCTTCCTTC	2040
CTAGCACTAG	GATGGCCAGC	TCTGGGCTGG	TTTCAGACTA	GGGTAGGTGC	AGGTGGGCCC	2100
TGGGCTTCCC	TCCTTCATTC	CTCCTGGGCT	CAATGCCAAG	CCGGTTTCCA	TTCTTTTAC	2160
GTGCACTGCG	AAGAGGCTTT	GGGGAAGCGG	CCTCATCCAT	CATGCAGAGA	GCTCCTCCCC	2220
CACCTCTACA	GAGAGCCAGC	CAAGCTGCTG	TCCTTGGCTC	TGCTCTGTCC	ACCCTGTGAG	2280
GAGGCTGGGA	TGAGGTTGGG	GATGGGGAGG	ATCAGGATTC	AGATGTTTTT	AAGTCTGAGA	2340
AGCAGGTGAG	CTTGGTCCTA	GAAGAATATG	GAAGGGGTCT	ACTGGGGTTG	AGATATAGAT	2400
CACTGTATCA	AAGTCAACAG	GGGGGCTGTG	TGGCTTTTTT	ATATCCCAA	GTCAGCTTGG	2460
TGCTGGTTTC	CTAGGCTTCC	TGAGTCCGAC	AAAGGTGCAG	TGTGTTAATC	TCACACCACT	2520
TCAAGGACTG	TTACAAAAAA	AAAATAGGAA	GGAGCTCGAT	TCGCCCCCTT	TTACAGGCAG	2580
GGTAACTAAG	AGCCAGTACT	TGCCCATGGT	CTGCTGTGTA	TAAAGAGGCT	CAGTAGACTC	2640
CCATTCAAAC	AACCTGTGCT	AGAGGCCTTC	TGTCGTCCTG	TGGCCAATTC	CCCTATTGCT	2700
CTCTGGAGTG	AATATTGGGA	TATTAAACAG	TACTGACCTT	GCTGAGGACC	CTCAGGGTAC	2760
TCAGCTCTTC	TGGCCTGCAA	AATGGGGCTG	GGACAGGTTG	GCCAGGATCA	TCCTCTGGTT	2820
GGGAGAACCA	GCTGCACGTG	GGTCTGGAGC	TCTTATTAGT	ACTGGGGTCC	CCATAACGCT	2880
CCATGGGCTC	AGCGGGAGGC	TGCACGGGAC	CATATTTAGT	CAGGGGGAGC	CAGAGCCCCG	2940
CTGGTATGCC	AAGCTGGGAA	TTCTTGTTTC	GAGAATTGCG	CCTGGCCTTT	TTGGGTTGTT	3000
TCCCGCCAG	GCCCAGGAGG	GAGGACCAGC	TCAGGACCTC	GAGGGTCCGT	GCGCGGGGAG	3060
CGAGGCGTCC	CCGGCCTGGC	ATGAGGCCAA	CTCTGCCTCG	ACTTCCTTTT	ATGGCCTGAG	3120

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	GAGAGACACA	CAGAGAGAGA	CAGAGAGACA	GAGAGACACA	CAGAGAGAGA	CAGAGACAGA		3300
	CACACACAGA	GAGAGACAGA	CAGACAAAGA	GAGAGACAGA	GACAGAGAGA	CACACACAGA		3360
5	GAGACAGACA	GACAAAAAGA	GAAGAGAGAC	AGAGACTTTA	GGGACGTAAT	CATCACAGGG		3420
	AAATCAAAGC	TAAGAGTGTG	ATGAAAAGAG	TGTCAGGTCA	GACAAAAGAG	ACAGGGGCCA		3480
	AGATCCGTAC	AGGGCTAAGG	GACACAGAGA	TTGAGAACAC	CGAGTGGTAA	GGGGGGCAGC		3540
	TGACAGCAGG	TCCCCCACAT	TCTCTTAGAG	TCTTAGCATG	CATCCTCCAA	GTGCCATAAC		3600
	GCAGTAGCAA	CCCGCTTTTC	AACGATGCTC	AGAGAAACCA	TGTTATTGGT	CCCAGGCACC		3660
10	CCGGTTGTAG	GGTGAAAGGA	GCTGCAGAGA	ACAAGTTGGA	AAAACAAGTT	TCCCAGCAGT		3720
	CACAGAGGAT	ATGCAGTGAC	TGTGCCGACT	TGTTTTTTTT	TTTTTAAGTC	CCCTTCCCCC		3780
	CCCCCGCCCC	GCCCCCGGCT	TGCTAAGCAC	AACCGGCTTC	GAATCTTAGG	AAGTGGCAGG		3840
	CGAATGAAGA	GGGGATGAGG	GAGAGAGGGT	GGCATCAAGT	CTCCAGTATG	TATGAACAGA		3900
	AAGAGGTTAA	AATCCAGCTG	GAATGGACCT	AGGGGAAGAA	ATTCTCAAGT	CTCCCTACAG		3960
15	ACTCTGAACA	CCGAATCCCT	TTTCTCTAAG	GACGCAGGAT	CTGGGTGGCT	GCAGGGAGCG		4020
	AGGCCTGAGG	CTGTGGGTCA	ACTTGCCAGC	AGCCCCCTG	CGCCTGCGCT	AGGTGGTTCC		4080
	CAGAGGCTCT	GTTCCTCACC	TGCAGGGGGC	GCTGGGAAGG	GCAGAGGACC	CTCCCACCCC		4140
	GCCCCGCAGT	CACCTCCCCC	TCCCCACCC	CGGGTAGCGC	TGACTCTATA	AAGCCAGATG		4200
			transcription start site +1					
20	TCCGAAGCAT	ACAGAGAGAT	TTGGACCATC	CCAGCCTGGG	ATCAGTGTCA	GATCCGAGCT		4260
	CTCCATCCGG	TGTTCTCCTG	CTAGTCCACC	CCAGTAGCAG	ATCTGTAAAGT	AGAAGTTGAT		4320
	CCCTTAGGGG	CAAGCCTGGG	CGGTGAGCTT	GAGCAGCTTC	TAAACATCC	TCCAGGGAGT		4380
	GGGGACCCCA	AGGGGTCTTG	ATTGTCATCT	CTTATAAGGA	CAGTGGGAAG	AAGCCCCGTA		4440
	CAGGACCACC	CTAGACCTCC	CGTGATTACT	CCCATTCTCC	GCACCAAACC	AGCATCCTCA		4500
	GGTTGCCTAT	GAACAGAACC	ACCTGGGAAA	GTGGGGTAGG	TAATTAAGG	TTCTGGCCAC		4560
	TGGGCCCAAT	TCCAGGTATT	TTAAGACTAC	AGTCTAAAAA	GCAAAACAAA	TGGCCTACTT		4620
	AAAAACTAAC	TAGTGACACA	GTGGACAAGT	GAAGTGTGGT	GGAAACTGTG	GGTCTGAATT		4680
	CAAAATACCAG	TATTGAAAAA	AATAAGAAGT	TGGGATAAAA	TATCCACTGA	ACATCCCCAG		4740
	AATACTCAAA	ACATGGGTTA	AAGTTTAATG	ACTCTGAACA	CAGGCCGTGT	GTTCTTATTC		4800
	CACCTCCTAAT	GGAATGTGCT	GTTGAAAATT	TACTGGTAAA	CAAAAATGCT	TAATGTTAAA		4860
30	TAAGGTCGTT	TCTTCCTCTG	TTACTTTCAA	AACACAAATC	TCCATTAAAA	AGGAACCTTC		4920
	TCCAGTTTGG	TTGGGCCCCC	AGATGCCCAG	GTGGGTGCTG	AGGCTCCATT	TGCATCCCCC		4980
	ACACTGAGTG	AGCAGACGAT	GGATTTTGGG	GCTCCTCAGT	GGGAAGGTTA	CTCTCAGGTC		5040
	AGGGAGAGGA	GCTAGCAGAG	AAATTTATGC	TATTCCAGTT	CAGAATTGGA	GAAGTCTTGC		5100
35	CATGTCCAGA	AAGCACCCCT	CAAAGTTATG	TCTGTCAGAG	AACAGAAAAA	TTTTTTTGA		5160
	AAGCCAGGAC	AAGGCTGCTT	TGGTTCTACT	ACTAAGAACT	GAAAAACTGC	TGACTTGCTG		5220
	GGAAAGAAGG	AAATCCGGTT	GTGTTTGTA	AAGTACTCTG	CTTCGTTGGT	TTCTGGGGG		5280
	AGGTTTTTTT	TTAGTTCAGT	AATTCAATAT	GCTATTTTAG	ACTCAAAGAA	AGACAGGTCT		5340
	GAAAGTCTCT	CATAACAAGA	AACACTTTCT	CTTTTATGAT	GTTGTTGATG	GCACACTTAA		5400
40	CAAGCCAGGT	GCTTTAACAG	CGTTTAGATG	GAAGTGGGTT	CTTTTAATCA	TCATATACAC		5460
	CTTACCTTGT	CTTGACATCT	CTGTTTTTCC	CAAAACCAAA	ATTTGTTGGA	CTCCTGTTTC		5520
	TGATGGATTG	AGTGTTTCCA	GCTTCCATCA	CTTTTTGAAG	AAGATTGAAA	CTGATCTTTT		5580
	ACCAATTTAA	AATGACAGAG	ACTGTCTTTT	AAATTTTGTT	GATGTTGTTG	TTTCCCTGTG		5640
	GATGTGGTAG	GGTTCCAGGA	GGCTGGCGTG	ATCTCAAACA	TGCCTGGGCC	AAGCCACCCT		5700
45	GGAGAAACCT	GGACTTTTAT	TATCAGATCT	GAAATAGAGC	CTCTTCCGTA	CAAGGTAGTC		5760
	ACTATGGATT	TATCATTACT	TTTCTGTGGG	AGGCTGGGCT	GGAGGCAGAC	ATGCCCTTGT		5820
	ATGGTAGTGT	TTTCTATGAG	GCCATTCCCA	GTCCCCCTTG	GCCAATCACC	CAGCCTTTTCG		5880
	ATGCAGCCTG	ACTGGCTTGA	GTTCTGGGTA	CTTCTCTGTC	TTTCCCTGTA	GAGATGGACA		5940
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50	GAAATTATAT	TCCACATATC	TAATAAGAAC	GGGTGGTGTT	TACATCTAAT	AAACCATTGA		6060
	ATAATTTTGA	AACAGGATAA	AGACGATCCT	TTTAGAAAAA	TATATCCCGT	TTCAAATACT		6120
	CAGAATCAGG	TCTTAACCAC	ATTATTTTGC	CAGGTATGGT	GGCTTGTGTC	TAAAATACTA		6180
	GCACTTGGGA	GGCTAAAGCA	AGAGAGTTTG	AGGCTAACCT	GGACTGCATA	GCAAGTTCAG		6240
	GCCATCCTGG	ACTACAGTGG	GAAACACTAT	CTTGAAAAAA	ATAAAAAATA	AAAATCAAAA		6300
55	CCCAGCCTAA	TGGTACATAA	CTTCAATTCC	AGCATCTGAG	GTAACCAGG	AAGCACAGCT		6360
	GATTAATGAA	CCCAAAGTCA	GCCTGGGCTA	CCTAAGGAAT	CCTATCTTTT	ACAATTTGTT		6420
	GATGCTGTTG	TCATTTTCCT	GATCACTTTC	CCATCTGCAG	AATGGGACTG	TTGAGAACAG		6480
	CCAGCGTGTT	AATGTTTCTG	TAGCACTTGC	TTAGTCTTCT	GAGAAGTAGA	AGATCACTTA		6540
	GCTAGGGTTT	GATCCCCATG	ACTGCAGCAA	AAGAGGAAGA	CTCATTAATT	GGAGTCTTCA		6600

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CAGTAGCCCT	TGGAACCAAT	ACTAATAGTC	TTCACTCCAT	TTCATAAATG	TGGGCTTTGA	6660
AAACTTTGTT	CTGTCTATAA	AAGATGGGGG	CTCTTACAAA	CTAAGCTTCT	TGTAACCTCA	6720
GAGCCTAATG	CCCTTTTGGG	AGCTTTCAAT	AGATAACCCA	TGTGAAGGGT	CTGACACAAG	6780
GCTGGCACCA	GCAAAGTTCA	GCAGATGGTA	ATTTATAGTA	ATATGACTAG	GGACGCTTAA	6840
GAGCATATTC	TGTATGACAC	AGCTGATATC	AAGAAACCCA	AACGGTGGCC	TTTCCCCTAA	6900
AGCAGAAACT	CACCCCTAAT	TTTCCTTTAG	TGTAAATCTC	ATAGTGGATT	CTTTGCTCCC	6960
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GCACTGTAGC	AAGGGGAGGT	CAGGCTACCA	TGATGCTCCT	GCGCTTCAGG	GAATTATCCT	7140
CTCAGAATGG	CCAACAGGGT	AGGGACCTGG	CCTGTTCCAC	TCAGGCCCAC	TTGAACTTTC	7200
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TAACAGCATC	CAAACGGAAC	ACATACAGAC	CTTCTTTCTT	GTCAGTGTCC	CTGAGTCAAG	7320
CAGCATAAGA	ACTATGTCTG	CCAACCTGCG	AGGGGAAGTT	GCTCAAGATG	CTATGCAAAC	7380
ACTCCAGCTT	TCCATGGAAG	GGACTTCAGC	ATCTATGGAT	GGTGGTAGCA	AAGCACTCCT	7440
CAAGCTGATC	AAAGAATAGC	TGTCCCTTCC	TGCCCTCCC	CTAATGAAGC	GTGCAGTCAG	7500
TGACAGAGAC	CTCAGAAATG	TCTTAGGTCA	CCAAAGGTCA	TTCTTGCCAT	CCCAGGCTCC	7560
AGATTAGCAT	TTTCTCCCTT	TTTATTTCCC	TCCATTTTGC	CTGTCTGCAT	ATGCACTACT	7620
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TCATTGTATG	TTACTTTTTTA	TCTGCTACGT	AGTATTCTGT	TACGTATTTA	ATAAAATATA	7920
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GTTGCCCATC	AGAAATGCCC	AGGACCAGAA	ATGTTCCAGA	GTTTTCTTTT	CTTTTAAATT	8040
CTTTTTTGATT	TTGGGATATT	TGCACATAAA	TAATTATATA	TTTGTATATA	AATAATGATA	8100
TATCCTGGAA	ACGAGCACTA	ATTCCTTTGT	TGCCCTGCTT	CTGGGTTTTT	TTTTTTTCTT	8160
TCCTTCTTTC	TTTTTGTTCT	TGGCCATCCT	GGAGCTCTCT	GTAGACCAGG	TTGTGCTTGA	8220
ACTATAGAGA	TCCTCCTGCC	TCTGCCCTCC	ACATGCTAAG	ACTAAAGGCA	AGAGCCATCA	8280
CACCCATCTG	TGAGCACAAA	TCTTGATATT	TCACCTTTGC	TTTATACAGA	TGGTTGTATA	8340
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TGTAATCACA	TGAGTTCCCTA	GCAAAGAGGT	GAATAGATAG	CACATTGGGA	ATCAGCATCT	8580
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GAGACAGGAA	CCCTCACCAG	CCTGGAACCT	GCCAAGTAGC	TAATTGGCTG	GCTCTTGACC	8940
CCTAGATCTC	TTTCCCCTCC	ACTCTAACGT	TACAACATAC	AGCTCTCTCT	CTCTCTCTCT	9000
CTCTCTCTCT	CTCTCTCTCT	CTCTCTCTCT	CTCATTTTAT	TTTTTAAAAA	AAATTTATTT	9060
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TGTCCTCAACC	CCAAAATGGG	CATCGGATCC	CATTCCAGAT	GGTTGTGAGC	CACCATGTGG	9180
TTGCTGGGAA	TTGAACTCAG	GACCTCTGGG	AGAGCAGTCA	GTAATCTTAA	TGCTGAGCCA	9240
TCTCTCTAGC	CCTTTCCCCC	TCTTCTAAAA	CATAGTTTTT	GAAGATCTAA	CGCAGATCTT	9300
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CTCCTGGTGC	AGCATGAGTT	TGAGGAACTA	GTGTGTATAG	CATGCTTTTC	CTTCTTCTTG	10080
GTATGTCAAG	TGACTTTCTA	GACGCAGATG	TGGCATCGAA	CTAGAACTAA	CATTATTGGG	10140

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CTTTGGTTTC	AAACTGGGGA	CAGTTTTCCT	TCTGGGAGTG	ATATCTAGCA	GTGTCTGGAC	10620
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AACTATTACA	AGCATGCTAG	TATCATTAA	TTGTGGGACT	CTGAATTCCT	TCCAAGGCAA	11760
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CCGTTCCCCA	AACCCAAACA	TTCTTGGGCA	CCAGGGTTCC	AAAGCATTCA	GTGTGGAACC	12240
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TAACCTTAAT	GCAATTTAAA	AAGAGGCAGC	TTGCTGTCCA	GGAGGAATGA	CACAAACACT	12540
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AGTCAGAGAC	AACTTGCAGA	AGATGGTTTT	CTCTTTTCTA	CATATGGGCC	CTGAGGATTA	13020
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TAGGATGACT	TTGAATTCCT	AATGTTCTTG	CCTCTACCTC	CTAGTTACTA	TGCCTGGCTT	13260
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GCACTCAGGA	AGAAGCTAAG	GCATCATGAT	TGTGAGTTTG	AAGCCAACCC	AGGTTACAGA	13380
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	AACATTCTAT	GTTATGGAAC	AAGTGCATTC	AATTTTACTA	AGTTTTTAAT	TTTAGCTTTT	13740
	TGTTTGTTTG	TTTTCTGTTT	GGAACAAGGT	CTTGTTGATC	CCAAGCATCC	TCAAAGTTGT	13800
	TGTGTAGCGA	AGGATGACCT	TGAATTTTTT	TATACTACTG	CCTTCTTGAG	GGCAAGCATT	13860
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5	GTGTATCTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGAGA	GAGAGAGAGA	13980
	GAGAGAGAGA	GAGAGAGAGA	GAGAGAGAGA	GATTAGAGAA	TAACCTGTGG	AAGTTCTCTC	14040
	CTTCTACCCT	GTGGGTCCCA	GGGTAAACTC	GGGTATAAAG	GCTTTGCACC	CTTTTTCCCA	14100
	CTGAGAACTT	CTTGCTGGCC	TCACTCCCTA	TTTTATTTTA	TTGGTGGCAG	TACTATTGCT	14160
	TTTGAATCCC	ATCTGAAGCT	TGTTTTTGTT	GTTTGGTTTT	TAAGGCAGTC	TTAACTGTGA	14220
10	CCTAAGCTGG	TTTAAAACTC	ACAGGAATTA	TCCACCTCCA	CCTCCCAAGT	GTTGGGGTTA	14280
	CAGATGTGAG	CCCCAAGCCT	GAGTGCCTCT	GAAAGCTGCT	TTTTTTTTATT	TCAAAACTAT	14340
	CTTTTCTCTG	TGTGTAGGTC	TGATTAGTTG	TGGGGTTAGG	TGGTGTGAGC	ATGATCCATC	14400
	ACTCTCCAGC	TATTATTCTT	AAAATGAAGG	GTCTGGGGGC	TGGGGATTTA	GCTCAGTGGT	14460
	AGAGCGCTTA	CCTAGGAAGC	GCAAGGCCCT	GGGTTCGGTC	CCCAGCTCCG	AAAAAAAGAA	14520
15	CCAAAAAATA	AAAAAATGAA	GGGTCTGGTG	GCTGAGGAAA	AAGCTCAGTT	GCAAAAAAAC	14580
	ATGAAAACCT	GATTCAATCT	GTAAAGCCCA	CATAAAAGCC	AGGCATGGCG	GCATGCACCT	14640
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	CTAGTTTAAT	TGGTGAGCTC	CAAGCTCAGT	GAGACCCTGT	CTCAAAAATA	AATGGAGATG	14760
	ATCTGTCAAT	AAGACCTGGC	CTCCATACAT	ATATGCACAC	ATGTTACTCC	CTCACATGAA	14820
20	ACATATTTAT	AAACAAACAT	ATGCACACAC	TTGTGCATAC	ATGAACAGAT	ATCTATATTG	14880
	GCATACACAT	TAAACACAC	ACACACATAT	ATATATACAA	AAGTGTGTAC	AAACATAGGC	14940
	ATAGTATACA	ACCATGCATA	AATGCACAGT	CACACATATG	AATGCATTCA	TATTCACACA	15000
	TGGACACATG	AACACATACA	TATATGCTAT	ATCTTATATT	ACACTCCATT	ACTATCCCCC	15060
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25	TTGCCTTTGA	ACAGCGATCT	CTCGACACCT	GATCCCCGCA	GTGCTCCCTG	CGGCAGAGCT	15180
	TCATCCGGAA	ACAACCCCCA	TGCACTCTAT	TGATTTTAAT	ACTGGGGATT	ACCTGGAGCC	15240
	TTGTAAAGCT	AAACACATTG	TCTACTGCTA	AATACTTCAT	TCTTTGCCCC	TTTCCCATGG	15300
	GGCGTTTTCA	ATCCAGTTAT	TTTTAGTGTG	TTCTTAGATT	TAAGCATCCA	CTAGTACAGA	15360
	TTCAAGGATA	TTTTTATTAT	CCCCCAAATA	ACAGTATTTG	TTAGGTGTAA	CCTTGTAGTT	15420
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	TTTTTTTTTT	TTTTTTTTTG	GGTTCCTTTT	TTCCGGAGCTG	GGGACCGAAC	CCAGGGCCTT	15540
	GCGCTTCCTA	GGTAAGCGCT	CTACCACTGA	GCTAAATCCC	CAGCCCCAAT	TCTGGACATT	15600
	TCTTATAAAT	GTCACATATG	TGTATGTGTT	CTTTCAGCAT	TGCAACACTT	TGGTTCCCTT	15660
	TTATGGCTCA	ATACTGGTCT	ACTTATGGAT	CTACCACACT	ATCTATCCAT	TCATCTCAAC	15720
35	ATAGTCATGG	GTGGTATTTT	TACTTTGGGG	CTATTATAAG	CTTGCTAGGA	GTATTTATGA	15780
	CCACATCTTT	AGATGCACTG	ATGCATTTCAT	TTATCCTAAG	AACAGATCCT	GGATCATATG	15840
	GTGGTTCTGT	GTTCAAACAT	CAGAGGCACC	ACCATTTATT	TTATAATAGG	CATTTAAGAT	15900
	TTGGGTATCT	TCTAACTGGG	TGGTGGTGGT	ACATGCCTGT	AGTCCCAGCT	CCTGGGAGGC	15960
40	AGAGGCAAGT	AGATCCGAAT	TCTCGCCCTA	TAGTGAGTCG	TATTAGTCGA	C	16011
						+11,795 (1st intron)	

SEQ ID NO:17

The 5' (-5086) and 3' limits of the Human SM-MHC Promoter-Enhancer LacZ Transgene Tested in Transgenic Mice

5 The number in the left margin refers to the position within an undefined BAC sequence contained in the public database (Accession # U91323 in GenBank). The start site (i.e. +1 position) of the SM-MHC gene corresponds to the BAC position 143,590.

10 138541 GATGGAGCCT CTCTCTCTAG CCTAGGCTAG AGTGCAATGG TGTGATCTTG GCTCACTGCA
138601 ACCTCCACCT CCCAGGTTCA AGGGATTCTC CTGTCTCAGC CTCCCAAGTA GCTGGGACTA
138661 CAGGCGTGCA CAACCACACC CGACTAGTTT TTGTATTTTT AGTAGTGATA GGGTTTTACC
138721 ATGTTGGCCA GGCTGGTCTC GAACTCCTGA CCTCAAGTGT TCCCTCCACC TTGGCCTCCC
138781 AAAGTGCTGG GATTACAGGT GTGAGCCACT GTGCCCCGCC AAAAAATATT AAATCTTGAG
15 138841 GCACATGCAG GAGTAAGCCA TGCTCAGACC CAATCTTCGA TGTTACTAAA AATTGGAGGG
138901 GATCACACTT CATGGTTTTG TTTTGTTTTG TTTTFTTGAG ACAGGGTCTT GCTCTGTTGC
138961 CCAGGCTGGA GTGCACTGGT ACGATCACAG TTTACTGCAG CCTCAAATC TGGGGCTCAA
139021 ACAATCCTCC TACTTCACCT TCTAGTTGGG ACTACAGGCA CACACTGCTG TGCTCGACTA
139081 ATTATTATTA TTATTATTAT TATTATTATT ATTATTATTA TTATTATTTT GTAGAGACAG
20 139141 GGATCTTGCT ATGTTACCTA GGCTGTTCTT GAACTCCTGG GCTCAAGCGA TCCTTCCGCT
139201 GCAGCCTCTC AAAGTGCTAG GATTACAGGC ATGCCAGCC ACTTTGGGGC TTTTAAAGC
139261 CAACAGCAAA AAAAGACTAT AAGAGAGAAA TTTCCCCTTG GCTGTCTTGT TTCATGGATT
139321 CGTGGAAACT CCCATTAAAC AGCCGGTCAC AGAAAAAGAT ATGCCAAGGA AAATTACTTG
139381 ACAGCACTCA GTCAAAGTGA CATTTTAAAA AGAGACTATT GCCTCCTCCA TCTTAAAGA
25 139441 ACTGACCTTT TGAGCCATGA GAAATGAAAC AGAGGCATCT GATCGAATGA TAACAATGCA
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139561 TAAGTGAACA TACTGTCCCT GCCTGCTTCC AGAGGGTACT AGAGAGGTCG GAGATGGTTC
139621 ATAAAGGCCT TCACATGTGC TGTCAATTTT AACAATCAGA AAGGTACTTG AGGCAAGAA
139681 TCTGATCATC TTTGTTTTTC CTTGAGAAAA TCGCTCAGA GAGGTTTACT GACAATCCCA
30 139741 AAGGTGCTTG GTTGGTGCTT AAGAGATCTG GGTTTAAAAC CTCAGACTGC TGTCTACTAT
139801 GGCTGTGTC AGAAAGACTG GGGTTGGAAT TCCTGTTCCA CCACTGCTGT GTTATTTAAC
139861 CCCTCCAAAC CTAGATTCTC AACAATAAAA TGGGGGTAGG GAGGGAATTA AAGTATGTAC
139921 CTTATTTTTT AGAGACAACA TCTTGCTCTG TCGCCCAGGC TAGAGTGCAG TGGTGCAATC
139981 ATAGTTCACT GTAGTCTCAA CCTTCCAAGC TCAAGAGATC CTCCTACCTC AGCCTCCCTA
35 140041 GTAGCTGGAA CTTCAGGCTA CACTACGCCC AGCTGCTATT TATTATTTAT TTATTTATTG
140101 AGATTGCATC TCACCATGTT GCCCAGGCTG GCTACTTAAA AAAAAATTTT TTTTCAAGA
140161 CAGGGTCTCA CTCTGCCACC CAGGCTGGAG TACAGTGACA GAGTCTCAGC TCACTGCAAC
140221 CTCTGCCTCC CAGGCTCAAG TGATCTTCCC ACCTCAGCCT CCCAAGGAGC TGGGATTACA
140281 GGTACCCACC ACCACACATG GCTAACTTTT TATTTTTTGT AGAGACAGGG TCTTGCTATG
40 140341 TTGCCAGGC TGGTCTCAAA CTCCTGAGCT CAAGCAATCC TCCTGCTTTG GCCTCCCAAA
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140761 GGCTGCCTAC TTTAATTTTT AATAAAGGGT TGTTATATAA GGGGTAGGTG AGAGAATGAA
140821 GTAAAATTGA GTGTTACAGT CTCCAGTTGT TAATCACATT ATAATTATTC TCTTTAAAA
140881 GTTACCAACA AGTTATTTAA AGAATCGAAT GGAACCCTTT GGAAATACAG TGTTATGCC
50 140941 TCTAGTATTA ATGCCAGTTT TTACTTCGAG GCCAGCAAGC TAGATTCCGA TGGCCTTCCC
141001 TTTCCAGGAT GGAAGCGGA TGATTGACTT CAATTTTCCC CCTTCCGTTA CTCTCTGCT
141061 CCACATCATT TCTGTGCTGA TGCAGGGACG ATTTCCACTC CTTTACAGC GTAGATGTTA
141121 AAAGCCTGTG CGGAGCAGCT CATTTCATCAT TTTCCGCAGA GCTTTACCCC TCACTTCCCC
141181 AGCCAGCTAA ATGCAGGCTG TTCTTGACTC TCTGATCTAG GCCCATTGCA GGGTGAGGGC
55 141241 CAGGCTCAGG AGTTTCCAGG GTGAAAACCA GGTAAGCTTG ATGTTGGAAG GATGAAGAAG
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141481 GACTGCTTAC AAAAAGGCCA GGAAGTAGCT GATGTTCTTC CCATCTTACA GGTAGGGAAA
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141781 CAGGGACTCA ATTTTCTCAC CTGCAAAATG GGGGTATTAA TAAAGCCACC CCCCACACCC
141841 CCGGCCCCCA GCCCCTCCAC CTGGTTGCAA GAGGAGTGGT TGTAGACTAA GGGCCTGCGT
141901 CAAGTACAGA ACCCAGGAGG GGTCTGCCCA ACTTTAACCC TCTCTCCAAA TCCTCTAGCC
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142261 CGGCCCGGCC CGGGAACCTC GGAGGAGCTG GTGCCGCGCG GGGAGCGGAG CGCCCGGGCT
142321 GCGCGGGGT CCCC GGCGCTG GCGCGGGGCC AGCCACCGC CTCGACTTCC TTTTATGGCC
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142981 GGTGGAGGTG GAGATGGCAA GTTGGGAAA GTAAAACTT CCCCTTCCCTG CACGGTTCCT
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143521 CTTTCCCAGC CGCGGGCAGC TCCGGGTCTA TAAAGAGAGG CGTCCGAGGA CGCGCAGGGA

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143581 GATTTGGACG CTCCGGCCTG GGAGGTGCGT CAGATCCGAG CTCGCCATCC AGTTTCTCTT
143641 CCACTAGTCC CCCAGTTGG AGATCTGTAA GTAGTAGTTG TCATTCTGGG GGCAGATTGC
143701 AGGGCAGGGG GGTGTTAAAA GTCTATAGG GTATTCTATA GGGGCTGGGG TGCACCTAGG
143761 GGTCCCTGTT GTCAACCTCG TAAGGGCCAT GGTGGGGGCA GAGTTGTGAT TTGGATCTCT
143821 CTCTGCCCTTA TCGTCTTAGA TTATCCTAGA CTTTCCCCAA ACAGCATTTT TTAAGATTGC
143881 CAGTGAGAAG TACCATTTTG GGGGTGCTTA TTAACGATAT CAATGCCTGG ACCCAACTCC
143941 ATTTCCCAAC TCTAGAATCC CCAGAAAAAC TGCCTTAAAA AAAAAAAAT TAGTCCCGAG
144001 TGATTCTTGT TAAGAGGCTA ATCCAGGAGA TATGCTCCCT TGGAAATCTC AGAGTCCCGG
144061 TGCAGACAAT CAAGGCATCT CACTTTTATT CTAGGCACCA AAAAATTTAC AGCTGAACCT
144121 CACTGAAAAG TCACTTGCTA TCACACAGAA GGGCAAAGTG AGGCTCCTTG TGGATTTGAC
144181 CGTATTGCAC AGTTGTGTTG ATAATGCATT AAATCAGTTA AAAACACATG GGCATAGGCT
144241 TAGCAGAAAG GAGTGTGTTT GTTTTTTTTT TTTAATCAGT TTAGGGGAGG TTCTTCTATG
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144361 TCTTCTCCAA ATTAAAAAAA AAAAAACAA CTCACCCAGG TTGACCCCAA AGGGCCCCCA
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144541 AATGGGTAAA ACGAGAGAAA GTGTGGCTAC TGCCTGTTGT AAGTTTTCTT CCAGCACAGG
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145081	GAGGTAAAGT	GTCACACAGC	CAGCAAGTGG	TAGAACCCAT	TCCCGGGTCA	GTTTGAGTCC
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145201	TCAGGTTTCT	GGTGGGACTA	AATGCTTCCA	ACAAAGTAAA	TGTTTATCAC	CGTGTCTTTT
145261	GAAGAAAACA	TAAACTGACT	TTTTGCACAT	TTAAAATAAA	AGGCACTGTT	TGTCCCCTGA
145321	TTGAGGGGGT	GACCTAGCTG	AAACCAGTGA	CCCTAGGTGG	GCTGCCATGC	CGAGAGTCCA
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145501	TTGTTATCAT	TACTTTTCCG	TGGGAGGGCA	GAGATTGAGG	CAAACATGCC	CATTTATGGA
145561	AGCGTTTTTC	ATGAGGCCAT	CCCCGGCCCC	CTCGTCAGTT	ACCCAGCCTT	GCACCCGAGC
145621	CCGGTTGGTC	CTGGCCCTGG	GGATTTGTCT	ACCATGTCCC	TCACCCATTG	AAGAAC TAGT
145681	GGAGAAACCC	TAAGGAGAAG	AGATTTGGGA	GGAAAGTGGG	ATTCTTTTTT	CCTACCCCTT
145741	CTTATTCAGA	GGTTTGATTT	TTTTGGGTGG	GGGGTGGGAG	GGAATTGTCT	CCTTTCCACA
145801	GGTCTTGAAT	CCAAACAGGT	GGGTCTTCCA	CGTTAGGCAC	AAGCGTGTA	TTCCAAGAGC
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145921	AAGGCCATAA	GCAAATTTAA	AAATCATCTC	CCGCACCTCC	CCAAACCTCA	CTTTCTCATC
145981	CGGGAAATGG	GGCTAATGAG	AATAACTCAT	GTTTTTTGGG	CACTTTTGCC	TGGCGAGATG
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146161	GCTAACCAGT	AAGGAAAAGA	AGATTCTACA	AATCTAGGTC	TTTCTAACTC	CAGAGTTTCA
146221	CAGATTACCC	TCATGGGAGG	ATTTGATGAG	CTAATGTGTA	TGAAGGGTTT	AGCACAGTGC
146281	CTGGCCCCCTG	GTAAGCTTCA	GTGATGGTTA	TTTATAGCAA	ACACAACCAG	AGAGTTCAAG
146341	ATGTTTGCTC	AGTATGGCAT	GGCTCATCTT	TGGCAGAACC	GGGAAGCCTA	AACTATGTGG
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146521	TTGGGAATGT	TACAAATTCC	AATTACATTT	GTTTAGGGTT	TTGTTTGTTT	GTTTTTGAGA
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146641	CTCCGCCTCC	TAGGTTTCAG	CACCTTCTCA	GCCTCAGCCT	CCTGAGTAGA	GAGTAGCTGG
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147181	TAATCCCAGC	AATTTGGGAG	GCTGAGGTGG	GGGGATGGCT	TGAAGTCAGG	AGTTTGAGAC
147241	CAGAGTGGGC	AACATAGCGA	GGCACCATCT	CTACAAAAAA	ATTTTTTAAA	TGAGCTGGGC
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147541	TTGGGCAGAG	CTGAGACTTG	TAACCTCGAAG	ACCTAAGGAT	CTTCCACAGG	CTAATGAATA
147601	GCTTGTTTTGT	GCTCAAGGGA	TGAAGCAGTG	AGTTGTTAGG	ACAGGACTGT	GAATAGGGCT
147661	GACATATTCA	GATGTGTCAA	ACATCGCTAA	TGCCATCTCT	GAGTAAATTA	GGCTTCAAAC
147721	AGATCGGGAT	TCTAATCCTG	GTTCCCCAAC	TTTTGCAAGG	GAGGGCCTTG	CATTTACCTT
147781	TCAAGACCCC	GATAGGCTTA	GCAGGAAAAA	GGGAATAATA	GATAATGCCA	CTCTTTCATC
147841	CTTGGAATTT	TTGTCTAATT	ATATGAATTT	ATCTGTAGGA	TAAATTTCCA	GAAATGCGCT
147901	TGCTGAGTTA	AAGGGCATGC	GTATCTAAAA	TTAATAGATA	TTGCAAATGA	CTGGCTAAAG
147961	ACATTGCAGA	CCAGGTGCAG	TGGCTCACGC	CTGTAATCCC	AGCACTTTGG	GAGCCGCGAG
148021	CAGGTGGGTC	ACCTGAGGTC	AGGAGTTCAA	GACCAGCCTG	GCCAACATGG	TCTCTGCTAA
148081	ACCCTATCTC	TACTAAAAAT	ACAAAAAATA	TCTGGGCATG	GTCGTGGGCA	CCTGTAATCC
148141	CAGCTACTCG	GGAGGCTGAG	GCACGAGAAT	CGCTTGAGCC	TCAGAGGCAG	AGGTTGCATT
148201	GAGCCGAGAT	CACACCACTG	CACCTCCAGC	TGGGCAAAGA	GTGAGACTCG	GTCTCAAAAA
148261	AAAAAAAAAA	AAGGCATTGC	AAATTGCAAC	TTGTTGCAGT	CACATATGAC	AGCAGTCCCC
148321	ATCCTCTTGG	CACCAGAGAC	TGGTTTCGTG	GAAGACAATA	TTTTCCAGGG	TGGAGTGGGG
148381	AGGATGGTTT	TGGGATGAAA	CTGTCCCACC	TCATCATCAG	GCATTGGTTA	GATTCTCATA
148441	AGGAACGTAC	AACCTAGATC	CCTTGCAGGT	GGAGTTGGCA	ATAGGGTTTG	TGCTTCTGTG

148501 AAAATCTAAT GCTGCTTATC TGACAGGAGG CGGAGCTTAG GCAGTGATGG TCACTCACCC
148561 ACCGTCCCCCT CCTGCTATGT GGCCTGGTTC CTAACAGGCC ATTGACTGAT ACTGCAGCAC
148621 AAGGGTTGGG GACCCCTGAC ATAGGAGACT ATACATTTAT TTAAAGCTGT GGTATGCCAG
148681 AATTGTAAAA TATAAACAC AGTGGGGCTT TTAGGGCCAG AAATAATCAG TTCTTGCTCG
148741 CTTCCAGAAG CATCCTTCAC AGGGGCTACC GTAACCTCTG CCAACCAAGT TCTCTTGGTT
148801 GGGAGGAAAA AATAGTGTTA TGCATTAAGA GAACTTCTTT CTGGAGTTAC TTGAAACCAT
148861 TGGTATTCAG ATGATTAGGC AGATGTCACA AGGCAATAAG AATGTGACAG GTTCACCATT
148921 CACTTTTTTTT CCTGTAAAAG TGAAGTAGGG CTTTCTTGGG AACAGCCCTT TGGGAGGTGG
148981 GGGGATGTGA ATGGTGAGGG GAGGGTAGAA ATGGTGAGAT AGGGTCAGGG GCAAGAAAGG
149041 GACTTTCTGC TAAGAATTAA TCGGGTGTCC ATTTACTCTT AGCAGAAAAAC TAGGATTAGA
149101 TTCTGGATTG TACTCCTGAC TCCAAATTTT ACAAGTGGGG GTCTTGCAAT TACCTTCCAG
149161 GACCTCGGTC ATCTTAGCAG GAAAATAGCA ATAGCAGGTG ATGCCACCTT ACAGAGCGCT
149221 TAGGAGACAG TGAGATGGTC TATATAGGAA GCTGTCTGGC CTGATACCTG ATGAATACAA
149281 GGGGCCCAAT AAATACAGTG GCTGTTATGA ATAATAGATC TAAACTGCCT TTTTGGTACT
149341 ACTGGGGACC TGCCAAGCAG GTGCATTTAG AGTGCCAGT GCCTCTCCCT GCGACACATT
149401 TGATGCCTCC CTACACCTGG ACCAGGCCTT GAGCGAGGAT TTCCACTGCA GAGGTCCCTC
149461 CAGCTGGCGA ATTGTGTTGC AGATCAGGTT CAGAGAACTT CTGTTTTGCC TGTGTGGCAT
149521 TCATTCATTG GTTTATTTGA AATAGAGATG GGATCTCACT GTGCTGCCCA GGCTAGCTA
149581 GAGCTCCTAA TTCAAGCAAT CCTCTTGGCT TGGCCTCCCA TAGTTCTTGG ATTACAGGTG
149641 TGAACCACTG TATCCAGCCC TTTATGACAT TTAGAATATG AGCAATTTTT CTTTTTCTT
149701 TTTTTCTTT TTGAGATGGA GTCTCACTCT GTCACCCAGG CTAGAGTGCA GTGGCATGAT
149761 CTTGGCTCAC TGCAACCTCT ACCTCCCAGG CTCAAGCGAT CTTCCCACCT CAGCCTCCCCG
149821 AGTAGCTGGG ACTACCGGCA TGTGCTGCCA TGCCTGGCTA ATTTTTGTAT TTTCTGTAGA
149881 GATGGGGTTT CACCATGTTG CGCAGGCTGG TGTCAAACCT CTAAGCTCAA GCGAACTGCC
149941 TGCCTTGGCC TCCCAGTGTT GGGATTACAG ACGTGAGCCA CAGTGTGAA CCCTGCATGG
150001 TATTTAGAAT ATAAGCAATA CTCTAACATC TGGTCTGGGT CACTCTGTAT TACTTACCTG
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150121 GTAAAATCCT GAGGGAAGCT GTTGACGAG TGAGGTGATG TGCAAATCCT ATACTCTCTG
150181 GGCTCTGGGA TATTTAATTT ACTATTTATT TATTTATTTT CAAGACAGAG TTTTGTCTT
150241 GTCGCCCAGG CTGGAGTGCA GTGATGGGAT CTCAGCTCAC TGCACCCTCC ACCTCCTGGG
150301 TTCAAGCGAT TCTCCTTCCT CAGCCTCCTG AGTAGCTGGT ATTACAGGCG CCCACCACCA
150361 CACCTGGCTA TTTTTGTAT TTTTAGTAGA GACGGGGTTT CACCATGTTG GCCAGGCTGG
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150481 AGGCATCAGC CACCATGCCC GGCCTAATTT ACTTTTTATT AATGCTGAAG CAGAGAGGGC
150541 AAGATCTTTT GCCCCTGAGT TCTTCTGGGA AAAATGAAAC TGATGGTAAA ACAAACTAAA
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150721 ACAAGGCCCA GAGAGGGCAA GTGACTTGTC CAGAGTCACC CAGCAGGTTT GGGGCAAAGC
150781 TGAGACTCGT TACTTGACAT CCTAAGGTCT TCCAGAGGCT AATGATTAGC TTGTTTGTGC
150841 TCAAAAAATG AAGCAGCCTG GCGCGGTGG CTCATGCTTG TAATCCTAGC ACTTTGGGAG
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150961 GACCCCTGTC TCTACAAAAA AATGCAAGAA TTAATAAATT AGCTGGGTGT TCTGGTGCCT
151021 GCCTGTGATC CCAGCTACTT GGGAGGCTGA GGTGGGAGAA TGGCTTGAGC CTGGGAGGCA
151081 GAGTTTGCAG AAAGCAGAGA TCGCGCCACT TCACTCTAGC CTGGGCAACA GAGCCAGACC
151141 CTGTCTCAAA AAAAAAGAAT GAAGCAGTTG TTGGTCAGGA CAGGACTGTA AACAAGGCTG
151201 ACACACTCAG ATGTGTCAAA CATCGCTAAT GCCAAAGGTG ACAGAGTCAT TTGTTTTCAT
151261 CCAAAACATT GAGAAAGTTG GACGAGGTGA CTCACGCTG TCATCCTAGA GCTTTGGGAA
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151381 GACCCCCATC TCTACAAAAA ATAAGCCGGG CATAGTGCC CACACCTGAG GTGGGAGGAT
151441 CCCTTGAGCC CATGAGTTTG AGCCTGCAGT AAGCTATGAT TGCACCACTG CACTCCACCC
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151561 AACTGTACTT CGTGGTCAGC AGTTCCTGGT AGTAATTTCA GAGATGTCTT TTCAGCCCTT
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151681 ATCAAGGTAG ATGAAGATG TCCCTGGGGT TGGGCCAACT GCGGTCCTGT CTCTGGTCCA
151741 GTGTGTTTAC CTTGCCCCG TCTGATCTTC TGCAGTTGGT ATTCCGAGTT GAGTTTGAAT
151801 AAGTGAGAGC TGCTCTCAGC TTTAACTGCC TTTCCCAAGA CAGCCCTTGT TTTTATTCTA
151861 AAGCTGTGGT TCTCAACTGG AAGCAGTTTT GCCACCCAG GGGACATCTA GCAGTGTCTG
151921 GAGACATTTT TGATTGTCTAT GAGTGGAGGA AGGGGTGCTA CTGGCATCAG GTGGGCAGAG
151981 ACCAGGGATG CTGCGGAACA TCCCACAATG CACGGAAGAG CTCCCCTCAC GACACAGAAT

152041	GACGCAGCCC	AAGAGTCACA	GTGCAGAGTT	TGTGGCCAGC	TGCGGTGGCT	CACGCCTGTA
152101	ATCCCAGCAC	TTTGGGGGGC	CAAGGTGGGA	GGATTGCTTG	AGGCCTGGAG	TTCAAGACCA
152161	GCCTGGCCAA	TATGGTGAAA	CCTCATCTCT	ACTAAAAATA	CAAAAATTAG	CCAGGCATGG
152221	TAGCGCATGC	CTGTAGTCCC	AGCTACTTGG	GAGGCTGAGG	CACGAGAATC	ACTTGAACCC
152281	AGAAACGTGG	AGGTTGCAGT	GAGCTGAGAT	TGCGTCACTG	CACTCCAGCC	TGGGTAACAG
152341	AGCGAGACTC	TGTGTCAAAA	AAAAAAAAAA	AAAAAAAAAGA	CTTAGCAACT	ATTATTACTA
152401	GTATTAGTAT	TATTAATTTG	TCAGGCTCAC	TGAATTTTCT	CAAAAATTTG	GCAAATTTTT
152461	AGGAAAACAT	TCTCAAAACA	TTTGGCAAAT	CTGTGGCTAA	ATGTTGTTTT	GGGGACCCAA
152521	GGCTCGTAGG	AGCAAAACAG	CTTTCAGGTT	TCCGGATCTG	CCAGAGACTC	AAGTGTCCCTG
152581	TTGTGTGTTT	TGTGTCTCAA	TGAGGGAAAAG	GGGAATATGT	AGCACCTTCC	AGATGGATTT
152641	GACCTTGACT	GCGCCACTGT	TTGAAGAGCT	TCTCAACCTC	CGCAGCTCCA	CCCCAGCCCA
152701	GATATTTTCAG	GGAATTAGGG	TTCCAAGGGG	CATGCTATGG	AAAACACCAT	TCTAGCATGA
152761	GTCGAAGCTT	CTCATCCCCC	ATCTTGCTGT	CTTTTGACCA	AAGCAGATTT	TGCACGTCGT
152821	AACTGTCAGA	GACATCAAAG	CCAGAGGGAA	TCCAGCCTGC	TCCAAGCTCT	CCTTTTTTGT
152881	ACAGAGACTG	AATCTTTGCA	CTTGATCTTG	TTTGTGTTTT	TAAGTCTGAG	GTTAGACAGG
152941	GTCCCAGGCA	ATGGAGGCGT	GCGTGTCTCT	TTATTTTCT	GTTGTAGCTT	TTGCTATTTT
153001	TTCTGACTTT	TAAGGCAACT	CATCCACATG	GCAATTAGGA	AGAGCCCCT	TAGGGCTGGG
153061	CACAGCGGCT	CATGCCTGTA	ATCCCAGCAC	TTTGGGAGAC	CGAGGCAGGC	AGATCACTTG
153121	AGGTCAGGAG	TTCAAGACCT	CAGCCTGGAG	AACATGGTGA	AACCCCGTCT	TCACAAAGAA
153181	TACAGGAAAA	TAGCTGGGCA	TGGTGGCAGG	TGCCTGTGGT	CCCAACTATT	TGGGAGGCTG
153241	GGGTGGGAGG	ATCACTTGAG	CCTGGGAGGC	GGAGGTTGCC	GTGAGCTGAG	GTCATGCCAC
153301	TGCACTCCAG	CCTGGGCGAC	AGAGCAAGAC	CCTGTCTCAG	AAAAAAAAAA	AAAAAAAAAA
153361	GAAGTCCACT	TTACTTGTC	TAGTGCTTAG	AACAAATGAA	ACACTCTCCT	AGCCCTCTTG
153421	GGATGTAATT	GGCTACCATC	TGCACAAACT	CTTCATTATT	GCACAAGAAT	ATCAATATAC
153481	TTAATGCTAC	TGAAGTGTGT	TTAAGTGGCC	GAGGTGGTGA	ATGTTAGCTG	TATTTTACCA
153541	CAATTAAAGA	TAAGAGGGAA	GGAAAATGAA	GTGTACTTTA	CAACCAAAAA	AGTACGCTTG
153601	ATGTGCAAAA	AAGTGTGCAG	CTTGATGAAT	TTTCAAGAGG	ATATATTTTT	TATAGATGGG
153661	GGTCTCACTC	TGTCACCCAG	GCTGCAGTGC	AGTGGCATGA	TCATGGCTCA	CTGCATCCCC
153721	GACCTCTGGA	GCTTAACGTG	TCCTCCCACC	TCAGCCTCCT	GAGTAGCTGG	GACTGCAGGT
153781	GCACACTATC	ACAACCGGTT	AATTTTTGTG	TGTTTGCTAG	AGACAAGGTT	TCACCATGTT
153841	GACCAGGCCG	GTCTCAGCCT	CCTGGGCTCA	GGTTATCCTC	CTACCTCAGT	CTTCCACACA
153901	GGTAATTAAA	AAACATTTTT	TCTTAGAGAT	GGGTCTTGCT	GTGTTGGCCA	GGCTGGTCTC
153961	AAACTCCTGG	GCTCAAGTGG	TCCTCCCATC	TTGGCTTCTC	AAAGTGCTGG	GATTACAGGC
154021	GTGAGCCATG	TCACCTGGCC	CAACAGTTTG	ATGAATTTTC	AGAAAGTGAA	CACTCATAGG
154081	GCTGGCATTC	AGATGAAGAT	CTAGAGGTCA	ACCCTCACAA	GCCCCCTCA	CGTCTGTGCC
154141	TGCTCAATCAT	TGCACACCGG	AGACTCATTC	ATTCCTTATC	TGAGTTCTAT	CACCGTAGAT
154201	TAATTCGTCC	TGGTTTTGGA	CCTCAGTTCA	ATAGTCACAG	AACCTGTGCT	TTTTGTGACC
154261	ACCTTCTTTT	GCTCAAGGAT	GTGTTGTGAG	ATGTCCTTTT	TTGTGGTGTG	GAGCTGTAGT
154321	TTACTTCACC	TGATTCGAGT	CCTATTTTGG	GTGTTTGTA	TGTGTCAGGT	ACTGTGCCAG
154381	GTGCCTTACA	GGATTGATT	CTTTATGGGC	ATCTGACAAG	CCCACCCACC	TTATGTGAAA
154441	GGCAGAACCA	AATAGACTCC	AGAATGAGAC	CCAGGTTTGG	GTCCCAGCTC	TGACACTTCT
154501	TTTTTTTTGA	GATGGAGGCT	GACTCTGTCT	CCAAGGCTGG	AGTGTAGTGG	TATGATGTCT
154561	GCTTACGGCA	ACCTCCACCT	CCCGGGTTCA	AGTGATTCTC	CTGACTCAGC	CTCCCAAGTA
154621	GCTGGGGCTA	CAGGCACGTA	CCACCAATCC	TGGCTAATTT	TTAATTTTTG	TATTTTATAGT
154681	AGAGACAGGG	TTTCACAATG	TTGGCCAAGC	TGGTCTCAAA	CTCCTGACCT	CAAGTTATCC
154741	TCCCACCTCA	GCCTCCCAA	GTTCTGGGAT	TATAGGCATG	AGCCATCACA	CTCGGCCTAC
154801	TTGTGATCAA	TCTTACTTCA	TCTTCACACC	CTCCCATTTT	TCTTACGCAT	CCTCCAGTTT
154861	CTCTCTCTCT	CTCTCCTTCT	TTTTCTCTCT	CTCTCTCTCA	CACACACACA	CACGATCTGC
154921	TGCGACACCT	TAAGAAACAA	GAGATTATCA	GGGAATGATT	GAATATTTTG	CCGCATTTCC
154981	TATTTTGCTG	CCTGTTTAAA	CTAACCTTGG	TTATACTATT	AAAAGAAGAC	GCGTCGTATC
155041	AAGCCACTTC	TGTGACTATG	CTGTGCCAGA	AATAAACATA	ATTAAAACAT	CCAACAGTAG
155101	TAAATGCTAT	TGTTTAGGAA	TGAGCGAAGT	GGCTTAGAGT	CACCGGAAGT	GAGAAAGGGT
155161	ATAGAAACAG	AAGGTACTTG	GTGTAGATCA	GGGGTGTCTT	ATCTTTTGGC	TTCCCTGGGC
155221	CACCCAGAA	AAAGAAGAAT	TGTCTTGGGC	CACACGTAAA	ATACACTAGC	ACTAATGATA
155281	GCTGATGAGC	TAAAAAATA	AAAAAAATC	GCGAAAAAAT	ATCATACTGT	TTTAAAGAAAG
155341	TTTATGAATT	TGTATCGGGC	CACATTCAAA	GCCGTCCTGG	GCCCCATGCA	GCCTGTGGGC
155401	TGCAGGTTAG	ACAAGCTTGG	TGTAGAGAGT	TTCATCTAAA	CTTCATGGCA	GCTCTGCAGG
155461	GCACCCGTTA	GGTCCCCAGT	ATTAATATAC	AGTAAATCTG	AGTCTCAGAT	CTACGTAAGT
155521	CACCCAGAAG	CACGCATTCT	GCAGTGGCAG	AGTCACGTTT	GAATTAGCAT	CTGATTGCAA

155581 AGTCTGGGTG TCTTTACATG ACTACAGGTT ATCTTACCTC TCAAGAGGAG GCAACCAATC
 155641 AAATGTTGCC AGCACCAATG AACTTGTACT TTATTTAGGC TCAGAAAGAT CTTTGTAGGCT
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 156241 AATCAGCCAG GCGTGGTGGC ATGCACCTGT AATCCTAGCT CCTCGGGAGG CTGAGGCAGG
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